

DETAILED ACTION

Status of the Claims

Claims 1-10 are pending.

Specification

The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Information Disclosure Statement

Receipt of the Information Disclosure Statement filed on 03/24/05 and 10/11/05 respectively is acknowledged and has been entered into the file. Signed copies of the 1449 are attached herewith.

Response to Restriction

Applicant's election without traverse of Group I, claims 1-8 and 10 in the reply filed on 02/11/08 is acknowledged.

Claim Rejections - 35 U.S.C. § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claims 1-8 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kober et al., (U.S. Patent Number 3,219,678) in view of Hajek et al., (U.S. Patent Number 3,892,634).

Applicants claim a process for preparing an isocyanate compound, wherein a primary amine is reacted with a phosgene in a reactor, where discharge from the reactor comprising isocyanate and carbamyl chloride is worked up in the presence of a film evaporator.

Determination of the scope and content of the prior art (MPEP §2141.01)

Kober et al., teach a process for preparing isocyanate which comprises reacting an amine with a phosgene wherein carbamyl chloride is discharged. See the entire reference especially columns 1 and 2 and Example IV. Note lines 44-65 in column 2 for the various forms of isocyanate applicable to the disclosed process.

Ascertainment of the difference between the prior art and the claims (MPEP §2141.02)

Kober et al., differs from the current process in that Kober does not teach the use of a film evaporator in the process. However, Hajek et al., teach that a film evaporator is employed during the separation of 2,4' and 4,4' methylene bis(phenyl isocyanate) from polymethylene polyphenyl polyisocyanates. See the abstract, column 1, lines 24-38 and especially column 2, lines 17-46. Note column 2, lines 29-31 that between 0.015 to 1% contain resinous by-products, which infers that amine hydrochloride and urea are present (claim 8).

Note Hajek teaches the use of multiple film evaporators (claims 5-6). It is also noted that Hajek is silent on the process pressures at which the film evaporators operate (claims 6 and 7).

Finding of prima facie obviousness--rational and motivation (MPEP §2142-2143)

Art Unit: 1624

Accordingly, at the time of filing this application, it would have been *prima facie* obvious to one of ordinary skill in the art to prepare isocyanates as disclosed by Kober et al., guided by the disclosures of Hajek et al., with a reasonable expectation that the resulting product(s) would be pure because Hajek discloses that the requisite film evaporator is known for preparing various isocyanates. See column 2, lines 1-9. Hence, one in possession of Kober et al., guided by the disclosure of Hajek is in possession of the instant process absent a showing of unexpected results or properties. The reaction that is being claimed is a predictable and expected reaction. Thus, the use of a film evaporators in the instant process *per say* is uninventive and *prima facie* obvious.

Accordingly, the instantly claimed process would therefore have been suggested to one of ordinary skill in the art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to E. Sackey whose telephone number is (571) 272-0704. The examiner can normally be reached on Monday-Friday from 7:30 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James O. Wilson, can be reached on (571) 272-0661. The fax phone number for this Group is (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (571) 272-1600.

EOS

**/James O. Wilson/
Supervisory Patent Examiner, Art Unit 1624**